Claims

1. A hinged armature valve comprising a drive part having a drive part housing in which an electromagnet unit with an iron core and a coil is arranged, a control part secured on the drive part, said control part having a control part housing, in which a control chamber is formed covered over by the drive part on it, in which control chamber a hinged armature is located, which in alternate succession can open and close a first valve opening formed on the drive part and surrounded by a first valve seat and a second valve opening formed in the control part housing and surrounded by a second valve seat, and a receiving recess, surrounding the first valve opening, in the drive part, such recess containing a return spring biasing the hinged armature into a home position closing the second valve opening, wherein the electromagnet unit is completely received in the drive part housing, the drive part housing being in the form of a plastic part molded by injection molding on the electromagnet unit; the receiving recess and the first valve seat are direct components of the drive part housing and are produced during injection molding of the drive part housing; the component part housing, also designed as a plastic part, defines the control chamber

together with the drive part and is so formed at the control chamber that it sets the position of the hinged armature in its longitudinal and transverse direction; and the two housings directly engage each other and in the joint region are connected together by a surrounding laser weld seam in a gas-tight fashion.

2. The hinged armature valve as set forth in claim 1, wherein on the side facing the hinged armature the electromagnet unit is covered over by a film-like thin plastic layer of the drive part housing and accordingly is accommodated in the drive part housing in a sealed capsule.

3. The hinged armature valve as set forth in claim 1, wherein the iron core has an E-like configuration and possesses three limbs respectively adjacent at one end to the hinged armature, the coil being seated on the middle limb.

4. The hinged armature valve as set forth in claim 3, wherein the iron core comprises a stack of laterally abutting pole laminations.

5. The hinged armature valve as set forth in claim 1, wherein for pivotally supporting the hinged armature a bearing projection is provided molded on the control part housing and extending from the side opposite to the drive part into the control chamber, such projection having an end section with a knife edge fitting into a transverse groove in the hinged armature bearing against the

opposite side of the drive part.

6. The hinged armature valve as set forth in claim 1, wherein the hinged armature possesses a closure member arranged between the two valve seats.

7. The hinged armature valve as set forth in claim 6, wherein the closure member is loosely inserted into a hole in the elongated, ferromagnetic base body of the hinged armature.

8. The hinged armature valve as set forth in claim 7, wherein the closure member is inserted from the side, which faces the drive part, into the hole in the base body, a radial projection provided on the closure member limiting the depth of insertion and the return spring engaging the closure member with a thrust effect.

9. The hinged armature valve as set forth in claim 7, wherein the closure member is seated in the hole with a limitation of pivoting on all sides so that its valve faces facing the valve seats may automatically align themselves on contact as regards the respectively associated valve seat.

10. The hinged armature valve as set forth in claim 1, comprising a first valve duct extending from the first valve opening, a second valve duct extending from the second valve opening and a third valve duct valve opening provided on the drive part housing and also opening into the control chamber, all three valve ducts extending

through the drive part housing and opening at a first, second and third connection opening at the outer face of the drive part housing, the duct regions extending in the drive part housing being produced directly during production of the drive part housing involving injection molding around the electromagnet unit.

11. The hinged armature valve as set forth in claim 10, wherein the first valve duct comprises a first duct extending in the control part housing and a second duct section extending in the drive part housing.

12. The hinged armature valve as set forth in claim 11, comprising a seal placed between the drive part housing and the control part housing, said seal surrounding on the one hand the control chamber and on the other hand the transition zone between the two duct sections.

13. The hinged armature valve as set forth in claim 10, wherein the first, second and third connection openings are provided on the base face opposite to the control part of the drive part housing.

14. The hinged armature valve as set forth in claim 13, comprising a connection board mounted on the base face of the drive part housing and having connection board ducts communicating with the valve ducts.

15. The hinged armature valve as set forth in claim 1, wherein the hinged armature is held axially in place

between a front end wall of the control chamber and an intermediate wall extending into the control chamber at a distance from the rear end wall, of the control part housing.

16. The hinged armature valve as set forth in claim 1, wherein the control part housing has an opening in the wall section delimiting the control chamber on the side opposite to the drive part, an actuating plunger extending through the opening in a sealing manner, such plunger being adjustable in the stroke direction of the hinged armature, manual operation thereof leading to the hinged armature being deflected without activating the electromagnet unit out of its home position.

17. The hinged armature valve as set forth in claim 16, wherein the actuating plunger is designed in the form of a slide able to be actuated simply by axial sliding or in the form of a rotary and sliding part able to be actuated by a rotary movement.